



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,410	07/18/2003	Gary R. Doyle	BUR920030024US1	1409

30449 7590 07/13/2005
SCHMEISER, OLSEN + WATTS
3 LEAR JET LANE
SUITE 201
LATHAM, NY 12110

EXAMINER

DUPUIS, DEREK L

ART UNIT	PAPER NUMBER
----------	--------------

2883

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/604,410	DOYLE ET AL.	
	Examiner	Art Unit	
	Derek L. Dupuis	2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 and 18-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-17 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group II, claims 12-17 in the reply filed on 4/27/2005 is acknowledged. The traversal is on the ground(s) that the subject matter of claims 1-23 is related that a thorough search for the subject matter of any one group would encompass a search for the subject matter of the remaining claims. This is not found persuasive because the search for the product (Group I) would involve a search focused in class 385, subclass 14 while a search for the method (Group II) would involve a search focused in class 398, subclasses 140-150 and 164.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-11 and 18-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4/27/2005.

Response to Arguments

3. Applicant's arguments, see page 11, in combination with the amendments to the claims, drawings, and specification filed 1/6/2005, with respect to the objection to the drawings, the objection to the specification, and the objection to claims 2, 4, 8, 12,a and 13 have been fully considered and are persuasive. The objections to the drawings, the specification, and to claims 2, 4, 8, 12, and 13 have been withdrawn.

4. Applicant's arguments with respect to the rejection of claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. The amendment to the claims to include

Art Unit: 2883

new limitations not previously presented in the claims resulted in a new search of the prior art and in the new grounds of the rejection presented below.

Claim Objections

5. Claim 17 is objected to because of the following informalities: the claims listing filed on 1/6/2005 is different from the previous version of the claims. It appears that the applicant inadvertently changed the number 10^{11} to 1011 and the number 10^4 to 104. For the purpose of examination, the examiner has interpreted the numbers as they were originally stated in the previous version of the claims the claim identify indicates that the applicant did not intend to amend the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Rodman et al* (US 5,757,658) and further in view of *Updegrove* (US 6,233,376 B1).

8. Rodman et al teach a method of transmitting signals in an integrated circuit comprising providing an integrated circuit as shown in figure 2. The integrated circuit (10) includes a plurality of cores (20) and a plurality of input/output ports (70) connected to signal pathways (see column 5, line 48 to column 6, line 21). Data is transmitted via selected optical paths between the cores. The act of selecting an optical path occurs when data is transmitted over the

Art Unit: 2883

path from one core to another. Rodman et al does not teach that the signal paths are optical fibers or that the signals being transmitted are optical signals.

9. Updegrove teaches that optical fibers can be used in an integrated circuit for signal transmission within an integrated circuit (see abstract and column 1, line 59 to column 2, line 30). Updegrove teaches that multiple signals of different frequencies can be multiplexed and carried on an optical fiber as is well known in the art (see column 2, line 66 to column 3, line 5). Updegrove also teaches that integrated circuits can include circuitry to convert an electrical signal into an optical signal for transmission along an optical fiber. While Updegrove does not explicitly state that the optical signals are transmitted and received by optical transmitters and optical receivers, it is implied and is routine in the art to transmit and receive optical signals with optical transmitters and optical receivers. These devices would be necessary for the optical data to be sent and received along the optical fiber lines. Updegrove et al teach that the signals carried on an optical fiber are light signals which fall in the claimed wavelength range of 10^{11} Hz to 7.5×10^4 Hz.

10. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the integrated circuit taught by Rodman et al by using optical fibers as transmission paths between cores as taught by Updegrove. Motivation to do this would be that optical fibers can improve transmission speed of an IC, increase bandwidth of signal transmission, decrease propagation delay in an IC, and can eliminate the problems associated with poor electrical connections in electrical wiring (see column 2, lines 8-26 of Updegrove et al).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derek L. Dupuis whose telephone number is (571) 272-3101. The examiner can normally be reached on Monday - Friday 8:30am-4:30pm.

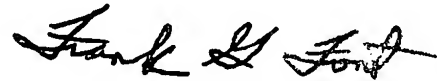
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2883

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Derek L. Dupuis
Group Art Unit 2883



Frank G. Font
Supervisory Patent Examiner
Technology Center 2800